



IECEX Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION
IEC Certification Scheme for Explosive Atmospheres
for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.: issue No.: Certificate history:
 Issue No. 1 (2015-9-7)
Issue No. 0 (2010-9-30)

Status:

Date of Issue: **2015-09-07** Page 1 of 4

Applicant: **Crystal Engineering Corporation**
708 Fiero Lane
San Luis Obispo
California
United States of America

Electrical Apparatus: **Digital Pressure Calibrator 30 Series, 90 Series**
Optional accessory:

Type of Protection: **Intrinsic safety**

Marking: Ex ia IIC T4 Gb

Approved for issue on behalf of the IECEx Certification Body: Dipl. Ing. Lukáš Martinák
Position: Head of the Certification Body

1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting the [Official IECEx Website](http://www.iecex.com).

Certificate issued by:





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Manufacturer: **Crystal Engineering Corporation**
708 Fiero Lane
San Luis Obispo
California
United States of America

Additional Manufacturing location
(s):

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEx Quality system requirements. This certificate is granted subject to the conditions as set out in IECEx Scheme Rules, IECEx 02 and Operational Documents as amended.

STANDARDS:

The electrical apparatus and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards:

IEC 60079-0 : 2011 Explosive atmospheres - Part 0: General requirements
Edition: 6.0

IEC 60079-11 : 2011 Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "I"
Edition: 6.0

This Certificate does not indicate compliance with electrical safety and performance requirements other than those expressly included in the Standards listed above.

TEST & ASSESSMENT REPORTS:

A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in

Test Report:

[CZ/FTZU/EXTR10.0018/00](#)

[CZ/FTZU/EXTR10.0018/01](#)

Quality Assessment Report:

[CA/CSA/QAR07.0004/03](#)



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Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The 30 Series Digital Pressure Calibrators are portable, battery powered instruments designed to measure pressure in hazardous areas. Further the instruments are able to measure loop current signals by means of two jacks placed on the front panel. The apparatus comprises electronics circuits arranged on two printed circuit boards, an LCD module and one or two pressure sensor assemblies, all housed in an aluminium alloy enclosure. The battery which must be of type listed below is housed in a separate compartment.

Input/output parameters, front jacks:

$U_i = 30 \text{ V}$; $I_i = 100 \text{ mA}$; $P_i = 0.75 \text{ W}$; $C_i = 0$; $L_i = 0$

$U_o = 9.9 \text{ V}$; $I_o = 2.62 \text{ mA}$; $P_o = 6.5 \text{ mW}$; $C_o = 3.2 \mu\text{F}$; $L_o = 100 \mu\text{H}$

Instruction for use - see documents 4435 30 Series and 4466 TRANSCAT Model 92.

CONDITIONS OF CERTIFICATION: YES as shown below:

1) Acceptable battery types:

- Varta High Energy 9 V, 4922 E Block, 6LR61, 6AM6, MN 1604
- Duracell Pile Alkaline 9 V, MN 1604, 6L, R61
- Energizer 9 V, Size 522, 6LR31, 6AM6
- Energizer Industrial Lithium 9 V, Format 522FP, 6LR31, 6AM6

2) The battery must not be replaced in hazardous location.

3) RS 232 interface must not be connected to any apparatus when using calibrator in hazardous location.



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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above):

Issue1:

- 1) There are minor changes in electrical schematic diagram without any influence to current level of safety.
- 2) Technical data and construction of apparatus, listed in the basic certificate remain unchanged